

# Advanced Bionics

The collaboration between Advanced Bionics and Phonak delivers unique innovation, providing unrivaled hearing performance to an expanding customer universe.



Advanced Bionics

Advanced Bionics – Creating solutions that enable cochlear implant recipients to enjoy a life without limitations.

Advanced Bionics is a global leader in advanced cochlear implant systems. A cochlear implant is an electronic device that allows people with significant hearing loss to hear the world around them. It is the only medical technology able to functionally restore one of the five senses. Unlike hearing aids, which amplify sound, cochlear implants bypass the damaged part of an ear and send electrical signals directly to the brain via the hearing nerve. Many children and adults who receive a cochlear implant are experiencing hearing for the very first time.

Advanced Bionics began working closely with Phonak in 2009, bringing together the most innovative cochlear implant and hearing instrument technologies. We invest more than 25% of sales in research and development, including our close collaboration with Phonak, which is a unique advantage. While the cochlear implant industry's expertise lies in transforming an acoustic signal into an electrical stimulus, we profit from Phonak's proven expertise in analyzing the sound environment and optimizing the acoustic signal itself – through intelligent, adaptive programs that recognize difficult listening situations, filter the voice or sound that is most important, and send it to either or both ears for an optimal, more natural hearing experience.

The first result of our R&D collaboration was the Naída CI Q70 sound processor, introduced in 2013. The Naída CI Q70 offers cochlear implant recipients the best of both worlds, harnessing the latest hearing instrument innovations and matching them with the precision, flexibility, low power consumption, and full upgradability of the Advanced Bionics HiRes 90K™ implant family.

The market success of the Naída CI Q70 marked a first step in our broad collaboration with Phonak, both in creating new products to further differentiate ourselves from our competitors and in opening new routes to market and methods to increase worldwide penetration of our customer base. We have seen excellent results from integrating our R&D; we are excited by the potential we can realize by integrating our marketing efforts.

### Building on our strengths

Every Sonova brand benefits from a rigorous product platform approach, extending the benefits of each innovative advance through comprehensive product families. This year, Advanced Bionics has rolled out new members of the Q Series processor family in its key markets. The Naída CI Q90 is the premium solution for recipients who want to benefit from the most comprehensive set of features and accessories. The Naída CI Q30, available in select markets, is the ideal hearing solution for recipients who value simplicity.

The Q Series processors allow us to offer even more features to cochlear implant recipients that were previously only available in hearing instruments: using Phonak's Binaural Voice Stream Technology™, the processors have the unique ability to communicate with each other so they can work together, automatically and in real time, wirelessly delivering the speech or music that recipients want to hear to both ears simultaneously while significantly reducing unwanted reverberation, background noise and sudden loud sounds. AutoSound™ OS intelligently analyzes and automatically adapts to the surrounding sound environment, so recipients hear their best wherever they go without having to change programs or adjust any settings.

Best of all, with the launch of Phonak Naída™ Link in May 2016, recipients can now gain the benefit of all these features when they have a cochlear implant in one ear but a hearing aid in the other. Increasingly, adults with significant hearing loss are receiving a cochlear implant when hearing in one ear deteriorates further. Until now, these recipients would have to put up with separate solutions in each ear, sometimes from different manufacturers, with incompatible settings and programs that both had to be adjusted by the user. With Naída Link, the hearing aid and sound processor work together as one, adjusting themselves and each other automatically and streaming sound to the appropriate ear for each listening situation. And like all Naída CI sound processors, the Naída Link bimodal hearing instrument works seamlessly with a full range of Phonak wireless accessories to give recipients easy, immediate access to phones, televisions, media players, and the Roger suite of wireless accessories. For adult recipients, this helps to ensure a smooth, easy transition to hearing with a cochlear implant.

Not every cochlear implant recipient has completely lost all hearing. Indeed, our HiFocus™ Mid-Scala electrode is specifically designed to help preserve residual hearing when surgically inserted – a benefit that was scientifically proven in a recent study from Vanderbilt University in the US<sup>1</sup>. This year, we introduced a way to make best use of that residual hearing: an adaptation of the Naída CI Q90 sound processor

for use in electro-acoustic stimulation, combining in one device precise electric stimulation with the acoustic amplification of a hearing aid, thereby providing more natural sound quality and allowing improved speech perception, better hearing in noise, and greater music appreciation<sup>2</sup>.

### Reaching new markets

The Sonova Partner Program gives Advanced Bionics the opportunity to work with other Sonova business units to identify new ways to deliver benefits, both to our recipients and to Sonova businesses around the world. The focus of the program is to foster partnerships between hearing instrument retail and cochlear implant clinics for the optimal treatment of people with significant hearing loss. It aims to raise awareness among hearing aid users who struggle to understand their loved ones even with the most powerful hearing aids of the benefit that cochlear implants might bring to their lives. In fact, this is a multiple-win proposition, with significant benefits for hearing care practices, cochlear implant clinics, and – most importantly – the people who benefit from our solutions.

Traditionally, when a hearing care professional recommended a patient for cochlear implantation, that person was effectively lost to the hearing care practice – but the collaboration between Advanced Bionics and Phonak can help resolve the problem to everyone's advantage. There are hundreds of thousands of people, of all ages, using Phonak Naída hearing aids; every one of them has a relationship with the hearing care professional who fitted that instrument. If those people receive cochlear implants, they can return to their hearing care professional for follow-up counseling and adjustment of the sound processor, for any of the wireless accessories they may need, and for the individual support they have come to rely on. The clinic, meanwhile, is able to share the post-surgery service workload – and offer additional solutions such as the Naída Link. Recipients gain by retaining a familiar, local expert to help through the transitional period, as well as from technology with the same look, feel, and functionality as their previous hearing aids.

This is a desirable outcome for everyone – and we are making it a reality by expanding our Sonova Partner Program, building awareness and providing training and software so that hearing care professionals can offer seamless service across the full range of Sonova's hearing care solutions. Advanced Bionics and Phonak are jointly developing marketing strategies, with plans for e-solutions and social and digital media platforms to get our message out: together, we offer a uniquely valuable proposition.

<sup>1</sup> Otolology & Neurotology, 37:235 – 240; Hearing Preservation Outcomes with a Mid-Scala Electrode in Cochlear Implantation

<sup>2</sup> Approved in the EU. Not approved outside of the EU

### Increasing our in-clinic presence

Our growth strategy also includes building greater presence in cochlear implant clinics worldwide. We are currently represented in approximately two-thirds of them; our goal is to be in all of them. This means engaging with decision-makers at every level to convey the clear advantages of Advanced Bionics.

As is usual in healthcare, each market has its own dynamics, so we are distributing our effort through several channels. We put emphasis on education and training and have hired more clinical specialists: audiologists who can discuss our solutions in depth with their clinical peers. We are very active in basic research: since 2010, the number of collaborative research studies in which we have participated has more than tripled. This active, evidence-based dialog with surgeons and audiologists creates connections for us with more clinics and deepens our relationship with those where we are already present.

In a digital world, people look first to the internet for information, advice, and contact, so we provide a wealth of online resources to assist them on their journey to better hearing. The Listening Room rehabilitative website offers families and professionals interactive online activities to support the development of speech, language, and listening skills. We offer a range of apps for tablets and smartphones that provide recipients with support materials or interesting ways to practice listening, build skills, and learn how to get the best out of their hearing technology.

N.B.: Not all products or programs described are available in all territories, nor are all features available in all devices.



## INNOVATIVE – AND CLOSE TO OUR CUSTOMERS

Christian Hartmann greets the two staff members in the Advanced Bionics service shop with friendly handshakes. Hartmann, a cochlear implant recipient, makes regular visits to this brightly-lit room at the German Hearing Center in Hanover. He needs new batteries for his two sound processors, and he's also looking forward to testing a new product. Hartmann, a tall man with a deep voice, asks: "Now I'm on tenterhooks! What have you got for me?"

As soon as a product is approved, Advanced Bionics offers selected recipients a chance to test it. Hartmann, an occupational safety expert, is delighted to take part in these trials. He has heard with cochlear implants in both ears for several years now, and he devotes some of his spare time to self-help groups for cochlear implant recipients.

Katrin Kowalzyk, one of the shop's employees, hands him the new Phonak EasyCall. This accessory wirelessly transmits the voice signals from a cell phone call to the Naída CI sound processors. The sound quality is superb. And once EasyCall is attached to the phone, a user can make calls at any time. Hartmann picks up the little box, examines it curiously and nods his head: "I'll be happy to take that home with me!" EasyCall, which is attached directly to the cell phone, is just one example of how cochlear implant recipients can benefit from Phonak's wireless technologies. Thanks to the partnership between Advanced Bionics and Phonak, the latest technologies for cochlear implants and hearing instruments have been brought together under one roof.


The German Hearing Center in Hanover numbers among Germany's leading cochlear implant facilities. Immediately after their medical consultation and diagnosis, patients have the opportunity to make direct contact with cochlear implant providers on the spot. Recipients and potential recipients enjoy

many benefits because the clinicians and providers are close at hand in the same building. Advice? It's available right here. Spare parts? Not a problem. "Contact with hearing instrument wearers is very personal. Sometimes they've only just been recommended for cochlear implants as the next step after hearing aids," Kowalzyk explains.

Feedback from recipients is very important for Advanced Bionics so that newly-developed products can be refined still further. Innovations such as EasyCall reinforce Christian Hartmann's decision to opt for Advanced Bionics. He connects Phonak EasyCall directly to his smart phone and asks Kowalzyk to call him. "I'll just pop out onto the street and test it," Hartmann says. A few minutes later, he returns and reports: "Thanks to EasyCall, I can now use both my ears and my Naída CI sound processors to make phone calls. That's marvelous, especially in noisy surroundings – at work or on the subway, for example!"





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